

Appl. No. 09/838,852
Amendment and/or Response
Reply to Office action of 27 October 2003

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REMARKS / DISCUSSION OF ISSUES

Claims 1-8 are pending in the application.

The Applicant thanks the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority documents.

The Office action rejects:

claims 1, 2, 5, and 6 under 35 U.S.C. 103(a) over Trika et al. (USP 6,630,931, hereinafter Trika), the admitted prior art, and Bekaert et al. ("Viewing in 3D", hereinafter Bekaert);

claim 3 under 35 U.S.C. 103(a) over Trika, the admitted prior art, Bekaert, and Gray III et al. (USP 5,856,829, hereinafter Gray);

claim 4 under 35 U.S.C. 103(a) over Trika, the admitted prior art, Bekaert, and Woodgate et al. (USP 5,808,792, hereinafter Woodgate);

claim 7 under 35 U.S.C. 103(a) over Trika, the admitted prior art, Bekaert, and Nelson et al. (USP 6,014,144, hereinafter Nelson); and

claim 8 under 35 U.S.C. 103(a) over Trika, the admitted prior art, Bekaert, and Halle ("Autostereoscopic Displays and Computer Graphics").

The Applicant respectfully traverses these rejections.

In each of the independent claims 1 and 6, the Applicant specifically claims the determination of multiple viewpoint images by updating a first image based on a homogeneity value and a multiple of a displacement along a single axis, the first image being obtained from a transformation from a 3D scene into vertex positions in a frustum viewing region.

As noted by the Examiner, Trika does not determine the right image from a left image based on the position of the viewpoint relative to the frustum viewing region. The Office action relies upon Trika for teaching the updating of the first image based on a homogeneity value and a displacement along a single axis. The Applicant respectfully traverses this characterization of Trika. Trika teaches the generation of a right image from a left image using the given equations 10, 11, and 12 (Trika, column 5, line 53 through column 6, line 25). These equations 10, 11, and 12 do not correspond to the Applicant's claimed technique of updating the image based on a homogeneity value and a multiple of a displacement value

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along a single axis. Of particular note, equations 11 and 12 are based on the distance from the eye point to the image plane, as well as the "x" and "z" coordinates of the vertices of each displayed object in both the viewport and window coordinate systems (vsx, wsx, vsz, wsz, vcz, wcz).

Neither the admitted prior art, nor Bekaert, nor Gray, nor Woodgate, nor Nelson, nor Halle, teaches or suggests the generation of alternative images based on a homogeneity value and a multiple of a displacement along a single axis of an image that is obtained by a transformation of a 3D scene into vertex positions in a frustum viewing region.

In view of the foregoing, the Applicant respectfully requests that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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